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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,236	02/25/2002	Takeshi Wada	033211-021	3854

7590

12/21/2005

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EXAMINER

MAGEE, CHRISTOPHER R

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/081,236

Applicant(s)

WADA ET AL.

Examiner

Christopher R. Magee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 2-7 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,8,10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/25/05</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagisawa (US 6,487,045 B1) in view of Novotny (US 6,289,564 B1).

Regarding claims 1 and 11, Yanagisawa discloses a head slider [1] with a precise positioning actuator [14], comprising:

a thin plane shaped head section [not numbered] provided with a first surface that is substantially perpendicular to an air bearing surface of said head slider, a second surface opposite to said first surface, side surfaces perpendicular to said first and second surfaces and at least one head element [12] formed on said first surface;

an actuator section [14] for precisely positioning said at least one head element [col. 8, lines 62-64; Fig. 1]; and

the head element [12] is at least one thin film magnetic head element (i.e., recording/reproducing element) [col. 15, lines 42-43].

Yanagisawa does not exemplify the actuator section including (a) a pair of movable arms capable of displacing its top end portions in response to a drive signal applied to said actuator

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section, both of said side surfaces of said head section being fixed to said top end portions of said pair of movable arms, (b) a base to be fixed to a support means of said head slider, said pair of movable arms extending from said base along said air bearing surface, and (c) a static part coupled with said base and formed between and spaced from said pair of movable arms.

Novotny shows (a) a pair of movable arms [42a, 42b] capable of displacing its top end portions in response to a drive signal applied to said actuator section, both of said side surfaces of said head section being fixed to said top end portions of said pair of movable arms, (b) a base [24] to be fixed to a support means of said head slider, said pair of movable arms extending from said base along said air bearing surface, and (c) a static part [44] coupled with said base and formed between and spaced from said pair of movable arms [col. 3, lines 49-52; col. 4, lines 5-11; Fig. 2].

In reference to claim 8, Novotny shows the air-bearing surface formed in the static part [Fig. 3].

Referring to claim 10, Novotny shows each of the pair of movable arms comprises an arm member [60] , and a piezoelectric element [68] formed on or fixed to a surface of said arm member [Fig. 5, which displays one side of actuator section 42a].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the head slider of Yanagisawa with actuator sections affixed to both side surfaces of the head section as taught by Novotny.

The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the head slider of Yanagisawa with actuator sections affixed to both side surfaces of the head section as taught by Novotny in order to alter the

position of the head section with respect to the main portion of the slider body [Novotny; col. 2, lines 3-7].

### *Response to Arguments*

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's arguments on pages 13-14 against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, Yanagisawa discloses all the features, *supra*, except of which Novotny shows (a) a pair of movable arms [42a, 42b] capable of displacing its top end portions in response to a drive signal applied to said actuator section, both of said side surfaces of said head section being fixed to said top end portions of said pair of movable arms, (b) a base [24] to be fixed to a support means of said head slider, said pair of movable arms extending from said base along said air bearing surface, and (c) a static part [44] coupled with said base and formed between and spaced from said pair of movable arms [col. 3, lines 49-52; col. 4, lines 5-11; Fig. 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the head slider of Yanagisawa with actuator sections affixed to both side surfaces of the head section as taught by Novotny.

The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the head slider of Yanagisawa with actuator sections

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affixed to both side surfaces of the head section as taught by Novotny in order to alter the position of the head section with respect to the main portion of the slider body [Novotny; col. 2, lines 3-7].

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (571) 272-7592. The examiner can normally be reached on M-F, 8: 00 am-5: 30 pm.

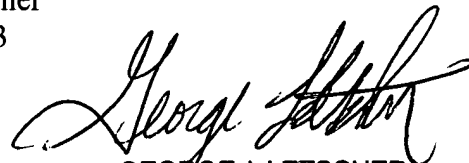
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Christopher R. Magee  
Patent Examiner  
Art Unit 2653

December 16, 2005  
crm

  
GEORGE J. LETSCHER  
PRIMARY EXAMINER